## EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

**PUBLICATION NUMBER** 

04187970

**PUBLICATION DATE** 

06-07-92

APPLICATION DATE

21-11-90

APPLICATION NUMBER

02319091

APPLICANT:

MATSUSHITA REFRIG CO LTD;

INVENTOR:

SHIBUYA HIROMI;

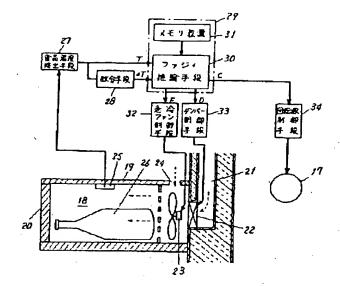
INT.CL.

F25D 11/02

TITLE

RAPID COOLING CONTROLLER FOR

REFRIGERATOR



ABSTRACT:

PURPOSE: To enable a constant cooling of food with an optimum cooling capacity by operating food temperature and operation volumes of a rapid cooling fan, a damper and a compressor corresponding to variations of the food temperature based on control rules obtained from experimental rules.

CONSTITUTION: A food temperature detecting means 27 detects a surface temperature of a food 26 from an output of a food temperature sensor 25, and a differenciating means 28 differentiates the output of the food temperature detecting means 27 to operate variations of the surface temperature of the food 26. The surface temperature and its variations are inputted into a fuzzy deduction means 30. The fuzzy deduction means 30 takes out control rules from a memory 31 and calculates, by a fuzzy deduction, capacity of a rapid cooling fan 23, opening degree of a damper 22 and revolution of a compressor 17, and provides outputs to a rapid cooling fan control means 32, a damper control means 33 and a revolution control means 34. Corresponding to the thus determined operation volumes, the rapid cooling fan control means 33 controls the capacity of the rapid cooling fan 23, the damper control means 33 controls the opening degree of the damper 22 and the revolution control means 34 controls the revolution of the compressor 17.

COPYRIGHT: (C)1992,JPO&Japio